



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,345	02/12/2004	Kyung-geun Lee	1793.1182	1717
49455 7590 06/04/2007 STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER PSITOS, ARISTOTELIS M	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 06/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/776,345	LEE, KYUNG-GEUN	
	Examiner	Art Unit	
	Aristotelis M. Psitos	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Art Unit: 2627

DETAILED ACTION

THE PREVIOUS OA (4/16/07) IS HEREBY VACATED AND THE FOLLOWING ACTION IS TAKEN.

In a telephone conversation between the examiner and applicants' representative, Mr. H. Levy, the inadequacy of the previous OA was discussed vis-à-vis the 103 rejection as articulated in the previous OA in paragraph 2 on page 4 thereof, see the interview record summary form for further details. The examiner regrets any inconvenience to applicants and their representative. The following new action is taken.

Applicants' response of 1/23/07 has been considered with the following results.

Information Disclosure Statement

The IDS filed on 3/5/07 has been received and made of record.

Errata

The examiner groups the claims into 3 areas: a) claims 1-17 having "compatibility information", b) claims 18-23 – having either a multi-pulse or single pulse write strategy information, and group c) having optimal writing pattern information.

As far as the claims recite positive limitations and as interpreted by the examiner, the following positions are taken.

The following sections of the prior art as identified in the action are illustrative only and not limiting.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

Art Unit: 2627

Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-32 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-32 of U.S. Patent No. 7009926 in view of the acknowledged prior art.

Claim 1 of the above patent is drawn to an apparatus (controller) which detects compatibility information from an optical disc.

The optical disc is the claimed invention in this application.

Hence, the examiner concludes that the optical disc is either obvious in view of the above noted claim since the above patent must detect an optical disc, and such must exist in order for the above patent to operate, or obvious in view of the above noted claim and the acknowledged prior art that discusses the recited areas, i.e., the read-in, read-out, user data area.

With respect to dependent claims 2-17 – they find full correspondence in claims 2-17 of the above noted patent.

With respect to present independent claim 18 vs. claim 18 in the patent, similar analysis is made, i.e., the controller in patent claim 18 detects the appropriate compatibility information from an optical disc, and the optical disc is the invention in the pending claim 18.

Remaining dependent claims 19-32 find correspondence in claims 19-32 in the patent and no further analysis is made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2627

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 1,2,4,5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsui further considered with the acknowledge prior art.

Concerning the wherein clause of claim 1, the examiner interprets the use of the newer standard as discussed in Tsutsui as teaching such. That is, Tsutsui is drawn to an optical disc that is compatible both to "old standard" and "new standard" drives, see the abstract for instance.

Further attention is drawn to the disclosure starting at col. 7 line 58, with respect to the disclosure of the pre-set standard – old standard" or "first encoding method" and continuing, to line 65 (same column), the upper order standard – "new standard" or "a second encoding method" is also present.

Continuing at col. 8 line 1 until col. 9 line 40 the discussion continues with respect to the old and new standards and how they relate as discussed therein with respect to figures 2 and 3.

Applicants' attention is also drawn to the discussion starting at col. 18 line 47 to col. 21 line 55 as well with respect to how the Tsutsui systems cooperates with the new and old standards.

This information is found in the appropriate toc area (management area/zone).

However, there is no clear depiction that the toc is found in either the lead-in, lead-out area, nor is there a clear depiction of such and the user data areas as recited in claim 1.

Nevertheless, these areas are well known as acknowledged by applicants in their description of the prior art/background art.

Art Unit: 2627

The use of existing discs with the appropriate lead-in, lead-out and user areas is considered an obvious expedience, i.e., use of already manufactured discs, that is using disc already manufactured having these areas (lead-in, lead-out, user) as the disc platform to which the system of Tsutsui is used in conjunction – i.e., the record medium thereof so as to permit the use of the existing media/platforms.

The ability of placing the toc information in either the lead-in, lead-out areas is considered obvious to one of ordinary skill in the art, motivation is to increase the amount of user data area by placing control information (toc of the primary reference) in a non-user data area, i.e., the lead-in, lead-out.

With respect to claim 2, the examiner also interprets such as indicative of the optimal writing pattern, since each A/B codec is written in the optimum pattern. The A/B codec is found starting at col. 8 line 51 and continuing till col. 9 line 25. Also, they are discussed starting at col. 17 line 24 and continuing till col. 18 line 46.

The limitations of claim 4, the examiner has interpreted this compatibility information as part of the toc, and such is a read-only area.

With respect to claim 5 the examiner so interprets the toc.

With respect to claim 7, since in order to record information on any disc, there must be a recordable area, the toc is so interpreted.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above, and further in view of the known –DVD – physical specifications version 1.9, July 1998, as noted in Sasa et al ('595).

The above analysis with respect to Tsutsui and the acknowledge prior art as applied to claim 1 is repeated.

Art Unit: 2627.

However, there is no clear depiction of the multi-pulse and or single pulse write strategy. Nevertheless, such techniques/strategies are well known/taught as indicated in the Sasa et al reference – see col. 8 starting at line 39 and continuing till line 65, with respect to the July version 1.9 of DVD Specifications.

The examiner does not have a ready copy of such, however, the description in Sasa et al is sufficient to meet the limitations of this claim. If and whenever such material becomes available, the examiner will transmit such to applicants.

It would have been obvious to modify the base system as relied upon above with respect to claim 1 with such a write strategy, motivation is to use existing strategies in order to make compatible newer versions of information and save the use the added expense of continually buying "new" versions of an optical rec/repro. apparatus.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection, i.e., due to its dependency upon claim 1.

4. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above, and further in view of Okanishi and further with Kobayashi ('494).

With respect to claims 12-15, various features are depicted – taught by the Okanishi document – see the discussion with respect to figure 3 starting at col. 5 lines 5-54. Also see the discussion with respect to figures 9 and 10 for the recordable area(s) starting at col. 7 lines 19-64.

The above does not clarify if the second DMA area is a "reserved area" or not.

Nevertheless, Kobayashi teaches in this environment, the additional ability of providing "reserved areas" in the lead-in section of a disc.

It would have been obvious to modify the base system as relied upon above with respect to claim 1 with such a format teachings from Okanishi – for the reasons stated therein and further with Kobayashi (reserved areas) to only proved for appropriate information in the reserved areas.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection, i.e., due to their dependency upon claim 1.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 12 above, and further in view of Sasa et al.

The information with respect to at least the write power is depicted/taught by the Sasa et al reference, for instance see the discussion starting at col. 7 line 43 and continuing till col. 12 line 48 as it discusses table 1 and optimizing the write pattern.

It would have been obvious to modify the base systems as relied upon above with respect to claim 12 and further modify them with the above teaching from Sasa et al, motivation is to use existing formatting capabilities so as to indicate various system parameters, and hence save valuable resources – such as time – in developing various formats in order to be compatible with those used in the present world.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection, i.e., due to its dependency upon claim 12/1.

6. Claims 18,19,20,21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsui considered with the acknowledged prior art, both further considered with the noted July 1998 version 1.9 DVD specification as noted in Sasa et al.

Tsutsui and the acknowledged prior art are relied upon for the reasons stated above – i.e., the acknowledged prior art with respect to the 3 physical structural components of an optical disc (lead-in, lead-out and user data areas) and the compatibility information as discussed above with respect to the Tsutsui reference.

Art Unit: 2627

The information with respect to the pulse strategy is taught by the Sasa et al reference with respect to the noted version 1.9 DVD information (i.e., the multi pulse strategy).

It would have been obvious to modify the base system of Tsutsui and the acknowledged prior art with such a write strategy additionally taught by the Sasa et al reference as it discusses the 1.9 DVD format, motivation is to use existing strategies in order to make compatible newer versions of information and save the user the added expense of continually buying "new" versions of an optical rec/repro. apparatus.

Further reliance upon the Tsutsui reference as discussed above in paragraph 2 is repeated herein for claims:

a) 19, such is considered present in – i.e., the A/B codec information portion as discussed with respect to the Tsutsui document – as noted above in paragraph 2.

b) 20 and 21, such are present – i.e., this is a read only area (management area/zone) and the reproduced signal is one of either a sum/different (differential signal).

c) 22, such is considered present – i.e., since such information must be recorded in the control zone in Tsutsui, the lead-in area requires a recordable area.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

7. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsui further considered with the acknowledged prior art and both further considered with Sasa et al and all further considered with Yamagami et al.

Tsutsui and the acknowledged prior art are relied upon for the reasons analyzed and stated above in paragraph 2.

Furthermore, as disclosed in Sasa et al, his system provides for optimum recording see the discussion with respect to figure 3 starting at col. 6 lines 15-20 as well as starting at col. 10 line 29 till col. 12 line 59. A controller is also discussed (element 10 of the system).

Art Unit: 2627

However, there is no clear depiction that this information is found in either the lead-in, lead-out area, nor is there a clear depiction of such and the user data areas as recited in claim 1.

As noted above in paragraph 2 with respect to lead-in, lead-out and user data areas, these areas are well known as acknowledged by applicants in their description of the prior art/background art.

The use of existing discs with the appropriate lead-in, lead-out and user areas is considered an obvious expedience, i.e., use of already manufactured discs, that is using disc already manufactured having these areas (lead-in, lead-out, user) as the disc platform to which the system of Tsutsui is used in conjunction – i.e., the record medium thereof.

It would have been obvious to modify the base system of Tsutsui with this acknowledge prior art with respect to the lead-in, lead-out and user data areas, motivation is to use existing disc formats as the record medium platform upon which modifications are made.

The ability of having additional areas within the lead-in area, is further discussed in Yamagami et al – see his “reserve area”, i.e., an area found as indicated in Yamagami et al – see his discussion with respect to figure 4 – either bytes 16-31 or alternatively bytes 49-2047 is known.

Further using such areas (within the lead-in of the reproduced only segment) in order to include additional useful information, such as the optimal writing pattern is considered obvious, that is one of ordinary skill in the art would require all appropriate information for optimal reproduction to be all ready placed on the disc so that upon reproduction the operating system performs/establishes the various system parameters necessary for reproduction. Placing such “control information” in non-user areas, permits the maximization of the user data.

With respect to claim 25, such are present in the above combination of references, i.e., the lead-in area is a reproduction-only area.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2627

8. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 25 as stated in paragraph 7 above and further in view of Okanishi and further with Kobayashi et al ('232).

With respect to claim 26, such disk control data zone is so found in the system of Okanishi, see the discussion with respect to col. 5, lines 15-35.

It would have been obvious to modify the base system as discussed in paragraph 7 above with the additional teaching from Okanishi, motivation is to provide for sufficient/additional control information to a reproducing system for ease of reproducing, i.e., permitting the user to insert the disc and sit back and have the system (reproducing system) appropriately operate.

With respect to claim 27, although the above combined systems do not clearly depict the sum signal, as noted in Kobayashi et al, with the description of figure 5 – see col. 4 lines 37-40, such sum signals are the product of the detected signals on the record medium and data is reproduced accordingly.

It would have been obvious to modify the above combined systems with the additional capability from Kobayashi et al so as to actual reproduce information.

9. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 24 above and further considered with Kobayashi et al ('232).

With respect to claim 28, this limitation is considered met when the information (optimal writing pattern) is first written in to the appropriate "reserved area", i.e., if the reserved area were not recordable, no information would be placed therein.

With respect to claim 29, the reserved area is so found.

With respect to claim 30, Kobayashi et al ('232) discloses/teaches in the optical environment the ability of having a "sum" signal reproduced for information – see the discussion with respect to figure 5, at col. 4 lines 37-40.

It would have been obvious to modify the base systems as relied upon with respect to the claims as stated above with respect to claim 24 and further modify such with the additional teaching from Kobayashi et al ('232) so as to reproduce "summed" signals.

Art Unit: 2627

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection due to their dependency upon claim 28.

10. Claims 6,8,21,23,27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1, 18, 24 respective above, and further in view of acknowledged prior art.

As argued by applicant these types of signals are well known to those of ordinary skill in the art.

It would have been obvious to modify the base systems as relied upon above as discussed with respect to claims 1, 18 and 24 and modify such in order to use established recording procedures. Such a modification is considered obvious to one of ordinary skill in the art, motivation is to use established procedures and hence save resources by not having to create/invent new procedures within which to operate a driver system readily available.

Conclusion

Allowable Subject Matter

Claims 9, 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable over the applied references as stated in paragraphs 2-9 above if rewritten in independent form including all of the limitations of the base claim and any intervening claims. *and the above noted double patenting rejection will over come.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-F: 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

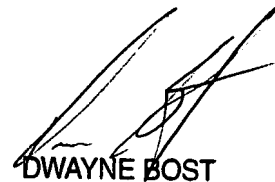
Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aristotelis M Psitos
Primary Examiner
Art Unit 2627



AMP



DWAYNE BOST
SUPERVISORY PATENT EXAMINER